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★ JUL 1 1931 ★

U. S. DEPARTMENT OF AGRICULTURE



Catalog No. 19  
July-Dec. 1931

Medal Awarded "Ball Stocks"  
S. A. F. National Show, 1931

*Flower Seeds for Florists*



## Fall of 1931 – and Business Is Improving

REPORTS from all sections clearly show increased activity in most lines of industry, and we cannot but feel that this will be definitely felt by us this fall and winter. We are gradually getting back up to normal, and this means a healthful competitive basis.

With this better condition our trade will become increasingly interested in fine and true strains of flower seed specialties that are so easily produced from good seed. We are very much interested in supplying you such seed. This not only means live seed that will grow if given a chance, but it also means carefully selected and well bred strains.

Another very important point is the selection of suitable varieties. Our position as extensive market growers gives us valuable and first-hand information regarding the worth of varieties. While we realize that our conditions might differ some from yours, the fact remains that we find out through our growing experience what is really good or worthless, and this information is reflected in our seed offering.

Please bear in mind that our seed specialties cannot be bought from seed jobbers, because we do not sell to them except in our packets. For your benefit as well as ours, avoid errors on this point by ordering direct from us through this catalogue.

**DISCOUNTS.** When remittance is enclosed with order we allow a cash discount of 3% on all orders of \$3.00 and up to \$10.00. On orders of \$10.00 up to \$25.00, 5%. Over \$25.00 a special cash discount of 8% is allowed. After sixty days all bills are subject to sight draft unless arrangements are made with us for extension. Special quotations are strictly net unless otherwise agreed upon.

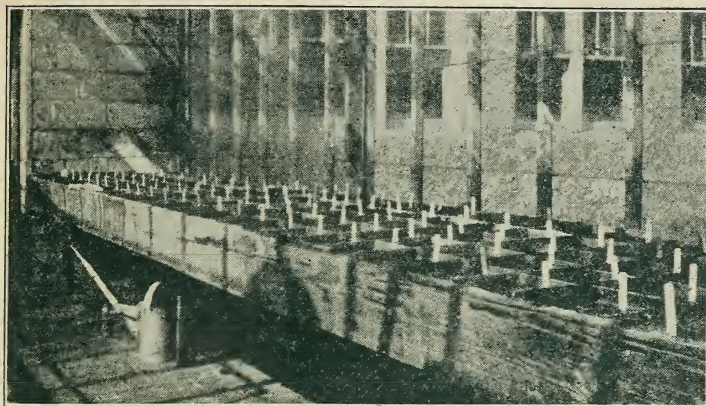
*To save delay in filling your order please observe the following:*  
If you are unknown to us or have no commercial rating, cash must be enclosed with order unless satisfactory Chicago trade reference is submitted.

**SMALL ORDERS** we welcome gladly and assure the same liberal and prompt attention given to larger ones. In return we suggest that cash be enclosed to cover the proportionately greater cost of handling. All prices are figured to cover postage and insurance.

*This list cancels all previous offers.*

# Can We Be of Service?

We regularly check up on the vitality of our seeds in soil, not under the ideal conditions set up by a seed germinator. For our own interest as well as yours, we send out



only seed that germinates well. There are many possible reasons for lack of germination. What we say about this under the heading of snapdragon seed, page 14, might be interesting. Also a special circular on early peas gives suggestions on the germination of this seed. For our mutual interest, remember that seeds are baby plants and need to be mothered along carefully.

**W**E frequently meet good growers whose experience does not cover the management of some of the annuals that have become valuable in recent years. And there is, furthermore, general interest in the most advantageous handling of cut flower crops grown from seed, as well as varieties most suited to particular needs or conditions. This calls for information, changes and improvements in every field of activity and leaves it vitally necessary to keep abreast of progress that is being made.

During the narrow, hard-worked days of the past it was considered by some the part of wisdom to keep information locked up. Today we realize that its diffusion raises the general standard of our business, thereby increasing the demand for our product.

For the possible benefit of those who leave to us the responsibility of supplying them with seeds, and for others who are interested, we publish a series of complimentary circulars that deal with approved methods of handling the leading cut flower specialties. They are numbered for your convenience in requesting them.

1. **CALENDULAS FOR MARKET GROWERS** gives complete detailed information for growing the fine stock so necessary for present-day market.

2. **CALENDULAS FOR THE RETAIL GROWER** (By Fritz Bahr) includes a record of production and returns on calendulas, as well as Mr. Bahr's masterfully practical ideas on growing.

3. **POINTS ON PROFITABLE PEAS** provides complete detailed instructions on growing winter peas, both the early-planted crop that flowers during midwinter and the after-mum planting for early spring flowering.

4. **SOME POINTS ON WINTER PEAS**, a recently prepared circular that is limited to the following phases of growing this crop: Soil sterilizing with hot water, cause and control of bud drop, cost figures and net returns of a crop of early-planted winter peas, with average returns for the season.

5. **LATE OR SUMMER PEAS.** The author points out a method of managing this type of sweet pea that has made them a most profitable outdoor crop for the past twenty consecutive years.

6. **STOCKS FOR MARKET GROWERS** details the most profitable system of growing this popular cut flower. The only established method of increasing the proportion of doubles is fully dealt with.

7. **ASTERS UNDER CLOTH HOUSES.** This circular deals fully with a form of protection for this crop that overcomes its most serious enemy, the yellows, and in further protecting them from wind and sun of summer, all the fine possibilities of asters are brought out.

8. **NOTES ON ZINNIAS** briefly details the conditions necessary to their successful growth.

9. **MISCELLANEOUS CUT FLOWER CROPS** discusses with some details the growing of the following crops: Snapdragons, Chrysanthemums, Sweet Peas, Calendulas, Candytuft, Larkspur, Giant Marigolds, Stocks, Asters, Annual Lupines, Clarkia and the author's method of steam-sterilizing greenhouse soils.





A field of our early, or winter-flowering sweet peas. Our Ball Rose is shown in the foreground, White Harmony in the back and our Ball Orange, the most vivid of all orange peas, is shown on the left. These fields, as well as our crops under glass shown on back cover page, are under our close, personal supervision and we are very sure that more carefully rogued and handled seed cannot be had from any source.

## Growing Winter Peas

THE most important point is fairly well enriched, clean, sweet soil and a light, well ventilated house; with these requirements peas are easily grown, without them they should not be attempted. With benches running east and west we prefer to plant double rows across the bench seven to eight inches apart with two to three feet between the double rows; two feet is plenty for the very late planting. If spaced at least seven to eight feet, rows can be run east to west without considering beds. Such crops as pompon mums can be fairly well grown between such spaced rows. If east to west rows are spaced much closer, we find they shade each other badly during midwinter.

Sow the seed in fairly moist soil, cover about an inch deep, and do not water until well germinated. If overwatered, seed will easily rot unless the germ is exceptionally strong. A night temperature of 48° to 50° is about right for this crop in flower, but with plenty of sunshine to balance the effect of higher temperature, 55° nights is more profitable.

The later, or after-mum sowing is more easily grown because it starts out under normal temperature conditions. Furthermore, a greater range of colors can be used for this sowing because it gets into crop with the increasing sunshine of early spring.

For detailed information on all phases of the growing of winter peas, refer to the circulars listed on the preceding page.

## Outstanding Winter Peas for 1931-32

**Early Pride (Ferry-Morse)** An extra long-stemmed, large-flowering, fiery cerise. It belongs to the class of heavy, tall growers that easily produce 25% more flowers than those of ordinary vigor. Our advance trials convince us that it is a first-class commercial variety.  
Tr. Pkt., 50c; 1/4 oz., 75c; 1 oz., \$2.00; 1 lb., \$24.00.

**Early Vogue** The past season's most successful new lavender. Extra large, clear color, with a slight bluish tone that we find places it at the top of the lavenders. 1/2 oz., 50c; 1 oz., 75c; 4 oz., \$3.00; 8 oz., \$5.50; 1 lb., \$10.00.

**Ball Rose** Pictured on back cover page. This is a rich, sparkling shade of deep rose and is generally used exclusively for this color. It is the most free-flowering variety among winter sweet peas.  
1/2 oz., 30c; 1 oz., 50c; 4 oz., \$1.75; 8 oz., \$3.25; 1 lb., \$6.00; 5 lbs., \$25.00.

**Ball's Rose Queen** An extra long-stemmed, fairly deep rose. Produces an extra heavy, free-flowering growth. A very profitable commercial variety.  
1/2 oz., 30c; 1 oz., 50c; 4 oz., \$1.75; 8 oz., \$3.25; 1 lb., \$5.75; 5 lbs., \$25.00.

**Giant Rose** A finely named variety, being extra large and well waved. Strongly inclined to produce four flowers on a stem. Does not belong in the extra long-stemmed class, but size and beautifully outlined flowers make it a valuable commercial. 1/2 oz., 25c; 1 oz., 50c; 4 oz., \$1.50; 8 oz., \$2.75; 1 lb., \$5.50.

**Laddie** We find this an extra large long-stemmed rose-pink. Very strong growth. 1/2 oz., 40c; 1 oz., 75c; 4 oz., \$3.00; 8 oz., \$5.50; 1 lb., \$10.00.

**Jeanne Mamitsch** An extra long-stemmed rose with a fairly deep color and fair size. Highly regarded by many commercial growers. Our stock of this is an especially selected one.  
1/2 oz., 30c; 1 oz., 50c; 4 oz., \$1.50; 8 oz., \$2.75; 1 lb., \$5.50; 5 lbs., \$24.00.

**Springsong** Extra large flowers of a highly attractive shade of rose with a salmon suffusion. Not extra long-stemmed, but holds buds during dark weather better than any variety we have, which gives it much value.  
1/2 oz., 30c; 1 oz., 50c; 4 oz., \$1.75; 8 oz., \$3.50; 1 lb., \$6.00; 5 lbs., \$25.00.

**Hope** Fine, large, free-flowering, black-seeded white, and we find it slightly more vigorous and free-flowering than other black-seeded whites. The color is so clear that we strongly recommend it in place of any white-seeded variety.  
1/2 oz., 40c; 1 oz., 75c; 4 oz., \$3.00; 8 oz., \$5.50; 1 lb., \$10.00.

**White Harmony** The standard black-seeded white, long stem, free-flowering and pure white.  
1/2 oz., 40c; 1 oz., 75c; 4 oz., \$2.50; 8 oz., \$4.50; 1 lb., \$8.00; 5 lbs., \$35.00.

**Ball Orange** Rich, clear, glowing orange, that becomes intensified with the higher temperatures of spring. The leading variety in this color.  
1/2 oz., 40c; 1 oz., 75c; 4 oz., \$2.50; 8 oz., \$4.50; 1 lb., \$8.00.

**Sunray** A brilliant soft cerise, with exceptionally long stems, especially fine for spring flowering.  
1/2 oz., 30c; 1 oz., 50c; 4 oz., \$1.75; 8 oz., \$3.50; 1 lb., \$6.00.

**Mrs. Herbert Hoover** A distinctly fine medium shade of blue with extra long stems and vigorous growth.  
1/2 oz., 40c; 1 oz., 75c; 4 oz., \$2.50; 8 oz., \$4.50; 1 lb., \$8.00.

**Ball's Blue** A large, clear, even blue of fine size and form, freely produced.  
1/2 oz., 30c; 1 oz., 50c; 4 oz., \$1.50; 8 oz., \$2.75; 1 lb., \$5.50.

FOR COMPLETE LIST TURN THE PAGE.

## “All the Best” Standard Winter Peas

WE fully appreciate the practical importance of our list of standard sweet peas and feel sure no inferior kind will be found in this list.

### PINK SHADES

	½ oz.	1 oz.	4 oz.	1 lb.
Columbia. Pink and white.....	\$0.25	\$0.50	\$1.50	\$5.00
Ball Rose. Deep rose.....	.30	.50	1.75	6.00
Ball Rose Queen. Rose-pink.....	.30	.50	1.75	5.75
Zvolanek's Rose.....	.25	.50	1.50	5.50
Jeanne Mamitsch. Long-stemmed rose.....	.30	.50	1.50	5.50
Louise Gude.....	.25	.40	1.40	4.50
Superior Pink. Deep rose.....	.30	.50	1.50	5.00
Pink Profusion. Rose-pink.....	.30	.50	1.50	5.00
Mrs. Holscher. Rose.....	.40	.75	2.50	8.00
Springsong. Salmon-rose.....	.30	.50	1.75	6.00
Mrs. Calvin Coolidge. Salmon-pink.....	.25	.50	1.50	5.00
Pink Cherokee. Cream-pink.....	.25	.40	1.40	4.50
Majestic Rose. Rose-pink.....	.40	.75	2.50	8.00
Giant Rose. Giant rose.....	.25	.50	1.50	5.50
Fair Maid. Light pink.....	.30	.50	1.60	5.50
Laddie. Extra large, long-stemmed, rose pink.....	.40	.75	3.00	10.00

### LAVENDER

Harmony. Large clear lavender.....	.30	.50	1.50	5.00
Lavender King.....	.25	.50	1.50	5.00
Sweet Lavender. Dwarf growth.....	.25	.50	1.50	5.00
Early Vogue. Large even lavender.....	.50	.75	3.00	10.00
Heather Bell. Mauve-lavender.....	.25	.50	1.50	5.00

### BLUE

Ball's Blue. Even blue.....	.30	.50	1.50	5.50
Mrs. Hoover. Strong blue.....	.40	.75	2.50	8.00
Blue Bird.....	.30	.50	1.50	5.00
Blue Jacket. Dark blue.....	.30	.50	1.50	5.00
Indigo Blue. Dark shade.....	.30	.50	1.50	5.50
Mrs. Harding. Silvery blue.....	.25	.40	1.40	4.50
Silver Blue.....	.25	.40	1.40	4.50
Blue Bonnet. Clear deep blue.....	.40	.75	2.50	8.00
Marine Blue. Extra large deep blue.....	.60	1.00	3.50	12.00

### WHITE

White Harmony. Standard white.....	.40	.75	2.50	8.00
Hope. Improved white.....	.40	.75	3.00	10.00
Snowstorm.....	.30	.50	1.50	5.00
White Star.....	.25	.40	1.40	4.50

### ORANGE AND SALMON

Ball Orange. Finest orange.....	.40	.75	2.50	8.00
Burpee's Orange. Lighter shade.....	.30	.50	1.75	6.00
Mrs. Kerr. Salmon.....	.30	.50	1.50	5.50
Eldorado. Light orange.....	.30	.50	1.75	6.00
Torch. Salmon-orange.....	.30	.50	1.50	5.50

### SCARLET AND CERISE

Early Bright Light. Orange-scarlet.....	.30	.50	1.75	5.50
Vulcan. Orange-scarlet.....	.30	.50	1.50	5.00
Grenadier. Poppy-scarlet.....	.30	.50	1.75	5.50
Flamingo. Orange-salmon.....	.30	.50	1.50	5.00
Gorgeous. Cerise.....	.30	.50	1.50	5.00
Glitters. Cerise.....	.30	.50	1.50	5.00
Sunray. Light cerise.....	.30	.50	1.75	6.00
Early Pride. Finest long cerise. Pkt., 50c; ¼ oz., 75c.....		2.00	7.00	24.00
Red Bird. Crimson-red.....	.60	1.00	3.50	12.00
Miss Spokane. Bright red.....	.30	.50	1.50	5.00



# Flower Seed *S. G. Ball* *Seeds* For Florists

WEST CHICAGO, ILL.

## MISCELLANEOUS

	1/2 oz.	1 oz.	4 oz.	1 lb.
Chevalier. Dark rose.....	\$0.30	\$0.50	\$1.75	\$5.50
Aurora. Carmine flaked.....	.30	.50	1.50	5.00
Harlequin. Chocolate striped.....	.30	.50	1.50	5.00
Meadow Lark. Cream.....	.30	.50	1.50	5.00
Yarrowa .....	.25	.40	1.40	4.50
Glorious. Rosy purple.....	.25	.40	1.25	4.40

"ALL THE BEST" MIXTURE. This is a combination of all the best standard varieties with a good proportion of the lighter shades that are preferred for retail work.

1/2 oz., 25c; 1 oz., 50c; 4 oz., \$1.50; 1 lb., \$5.00.

## Late or Summer-Flowering Peas

With the early-flowering kind planted after mums or later, we use this late type, planting individual plants six to eight inches apart in the row with the earlies. The late kind branch freely at the base, not getting up until the earlies are giving out, after which the strong-growing late kind produce heavily well through June. This greatly prolongs the sweet pea season, and we suggest its use unless mums are to be planted early.

IN northern border states and Canada late peas can be sown outdoors early and will flower freely throughout the season. In the latitude of Chicago they must be started early and planted out as well established plants for the best results. South of the Ohio river they are sown late in the fall and after they are well through the ground they can be carried through a considerable freeze by covering with any loose material that will prevent sudden thawing and freezing. Nothing is more valuable as a covering than snow.

We have grown these peas successfully as an outdoor crop for the past twenty-two consecutive years and we have prepared a circular that details our method of handling them. If interested, send for it. If properly managed, there is a nice profit in late outdoor peas.

The varieties marked \* are the choicest cut flower colors.

	1/2 oz.	1 oz.	1 lb.
*PINKIE. The finest commercial rose-pink.....	\$0.20	\$0.30	\$2.75
*HEBE. The standard rose-pink.....	.15	.25	2.25
HERCULES. A very good rose-pink.....	.10	.20	2.00
HAWLMARK PINK. Rose-pink shaded salmon.....	.15	.25	2.25
ELFRIDA PEARSON. Clear, light pink.....	.10	.20	2.00
*MISS CALIFORNIA. Very fine salmon-rose-pink.....	.15	.25	2.25
YOUTH. Light Picotee pink.....	.10	.20	2.00
*MAGNET. The finest rich cream-pink.....	.20	.30	2.75
MRS. CUTHBERTSON. Pink and white bicolor.....	.10	.20	2.00
SUPREME. Soft delicate pink.....	.15	.25	2.50
*HERO. A large rich cerise.....	.20	.30	3.00
MARY PICKFORD. The finest cream or salmon-pink.....	.15	.25	2.50
*CONSTANCE HINTON. The best black-seeded white.....	.15	.25	2.25
EDNA MAY IMPROVED. Fine, large white-seeded white.....	.15	.25	2.25
*AVALANCHE. Finest white-seeded white.....	.15	.25	2.50
*POWERSCOURT. Finest lilac-lavender.....	.10	.20	2.00
*AUSTIN FREDERICK IMPROVED. Large rosy lavender, extra strong growth.....	.10	.20	2.00
*GLENEAGLES.....	.15	.25	2.50
HAWLMARK LAVENDER. Fine light lavender.....	.15	.25	2.25
*BLUE BIRD. The finest clear blue.....	.15	.25	2.25
MRS. TOM JONES. A very good blue.....	.10	.20	2.00
COMMANDER GODSALL. Deep violet-blue.....	.10	.20	2.00
CRIMSON KING. Sunproof crimson.....	.10	.20	2.00
ROYAL SCOT. Sunproof orange-scarlet.....	.10	.20	2.00
*CAMPFIRE. Sunproof deep scarlet.....	.15	.25	2.50
ROYAL PURPLE. Large rich purple.....	.10	.20	2.00
WARRIOR. Deep bronze-maroon.....	.10	.20	2.00
MATCHLESS. Clear deep cream.....	.15	.25	2.75
DOREEN. Large rich carmine.....	.15	.25	2.50
"ALL THE BEST" MIXTURE. Of the choicest colors most wanted.....	.10	.20	1.80

NOTE: Any one of the above varieties in 5-lb. lots at a 20% discount from lb. prices. We also supply 1/2 lb. at lb. rates on above late-flowering varieties.

# The BALL Calendula



Vase of our  
Ball's Gold

All the long-stemmed, large-flowered type of Calendula of today are of the strain we originated and released ten years ago. Through the same careful work by which we originated this Calendula we are maintaining and improving its excellence.



## Ball Calendula "Standard of the World"

THE MOST VALUABLE AND EASILY GROWN MIDWINTER CROP IS THE BALL CALENDULA. If sown not later than August 1 in a night temperature of 45° they will be in full crop for December and January—the season of highest flower values. They are most economical to grow, doing best in a low temperature, and, unlike bulb crops, the cost of seed is an insignificant item—about a dollar for a 100-foot bench, even when the best grade of seed is used.

We originated the Ball Calendula eleven years ago and we are as careful as we can be to maintain and improve the original high quality of our stock.

The following varieties are all distinctive, and for those who are not familiar with them, they are listed in the order of their cut flower value.

**BALL'S LONG ORANGE.** This is an extra long-stemmed selection from our regular orange, large flowers and vigorous grower. We do not hesitate to head our list of profitable calendulas with this variety.

**BALL'S LEMON QUEEN.** This is a bright yellow with an attractive dark center that greatly enlivens the color effect. The shade of yellow is distinctly lighter than our GOLD; it is one that contrasts most distinctively with the rich dark brown center that characterizes fully 95% of this variety. Of true Ball Calendula length of stem and growth.

**BALL'S ORANGE IMPROVED.** Produces large, deep full flowers. Of more compact growth than our Long Orange, but if grown on deep ground beds the stems will be amply long.

**BALL'S SENSATION.** Of true Ball Calendula growth, with long stems and large, rather flat flowers. This is the preferred orange variety with some growers.

**BALL'S GOLD.** Deep golden yellow. Extra large and extra long-stemmed. For a rich, showy color on extra long stems, this variety is supremely fine.

**BALL'S SUPREME.** A rich shade of light orange with a finely contrasting dark center, a most attractive combination of colors. This variety is not quite so long-stemmed or large-flowered as are our orange and yellow varieties, but this is more than balanced by a freer-flowering habit. Preferred by many growers.

**BALL'S APRICOT.** This is a rich straw, or apricot color with a fine dark brown center, and the same type of growth we have in Ball's Supreme, from which it is a selection. A limited amount of this should be grown by any market or retail grower.

**BALL'S WHITE.** An attractive creamy white with a dark brown center that contrasts strikingly with the nearly white flower. Not quite so long-stemmed or large as apricot, from which it is a lighter selection.

**RADIO.** This is not a "Ball" type of calendula and is too short-stemmed for cut flower purposes. Petals have a distinct quilled effect in well opened flowers. Bright orange color and fine for bedding.

**PRICES** on all the above Ball Calendula and Radio: Tr. Pkt., 50c;  $\frac{1}{4}$  oz., \$1.00;  $\frac{1}{2}$  oz., \$1.75; 1 oz., \$3.00; 2 oz., \$5.00; 4 oz., \$8.50.

Unit price on weight will apply to two or more varieties. For instance, for  $\frac{1}{4}$  oz. each of two varieties, the  $\frac{1}{2}$  oz. price, or \$1.75, applies.

**BALL'S CALENDULA MIXTURE.** For the retail grower whose planting is limited and who wishes some of all colors in Ball Calendula, we have prepared a mixture of all the above excepting Radio. This mixture is proportioned according to the cut flower value of all colors and includes about one-half orange.

Priced as follows: Tr. Pkt., 40c;  $\frac{1}{4}$  oz., 75c;  $\frac{1}{2}$  oz., \$1.25; 1 oz., \$2.00.

**LEMON QUEEN.** We have a finely selected stock of this light, or lemon-yellow.

Tr. Pkt., 25c;  $\frac{1}{2}$  oz., 50c; 1 oz., \$1.00; 2 oz., \$1.50.

The following kinds are distinctly dwarf and small-flowering. Fine for bedding.

**NANKEEN.** Cream shaded apricot and pink.

**TRIANON.** Apricot shaded yellow, dark center.

Priced at  $\frac{1}{4}$  oz., 25c; 1 oz., 75c.





# BALL STOCKS

## EXCELSIOR OR NON-BRANCHING TYPE

THROUGH careful single-plant selection in our greenhouses during the past three years we have trued up a clear lilac-lavender strain of stocks that is supremely valuable for cutting. During the past two years we have grown this strain heavily for the Chicago market, where it has become known as

"**BALL STOCKS**"  
(Non-Branching)

During this time we have marketed it daily from St. Valentine's Day to Memorial Day. We know from this experience and from awards and commendations that its value is fixed and that this type will be used exclusively for cutting as promptly as the various colors can be trued up to the non-branching habit and with a good percentage of doubles.

The strain of lilac-lavender we are in position to offer this season is 100% non-branching and produces a high percentage of doubles. The massive and closely set, long-stemmed flowers are shown in the photograph, but it gives no impression of its silvery lavender color, nor of the stiffness of stem, leaves and flowers that is due to the fact that all the plant's energy is centered in the one stem and flower spike, making it rigid. However, the very weight of the flower is such that it gives it a graceful effect for any cut flower purpose calling for long-stemmed flowers.

Awarded the S. A. F. medal at the Cincinnati National Show, March, 1931, and a Certificate of Merit by the North American Flower Show, Detroit, March, 1931. Also a Certificate of Merit by the Chicago Florist Club. The Commercial Flower Growers of Chicago, the leading organization of cut flower growers in the U. S., had this to say at its meeting of April 25, 1931: "The committee wishes to commend Geo. J. Ball most highly for his splendid new lavender stocks. The specimens displayed were of exceptionally fine growth, very large-flowered and beautifully colored. The committee recommends the award of the society's Certificate of Merit."

There are a number of colors of this type of stocks, listed as Excelsior Column, or non-branching, nearly all of them we find branching to the extent of 80% to 90%, and the proportion of singles is unprofitably high. In addition to our silvery lavender we are working on several other strikingly fine colors and they will be released as promptly as we can find them profitable for you.

With the seed formation confined to but a single stem, instead of many, as in the branching kind, its production is limited, which will always leave it more costly than the branching kind. We are expecting a fair harvest of seed of the silvery lavender color that will be ready for delivery after about mid-August—timely for your early sowing.

Trade packet of fully 1000 seeds, \$1.00; \$10.00 per oz.;  $\frac{1}{4}$  oz. or  $\frac{1}{2}$  oz., same rate.

IN GROWING we space as we do the branching kind, in rows across the bed, seven inches apart and two to three inches in the row. All stocks should be watered with caution—only when really necessary and when sun and open ventilators will dry them off before night. No really fine flowers of any kind can be grown in a dark house, and stocks grown in a night temperature of 45°, at least until they set buds, will be of finer quality than at 50°, and quality counts.



## American Stocks

FINE, long stems, a dependably good percentage of doubles and trueness to type and color, explain why American-grown strains of stocks are turning the attention of cut flower growers to this crop. Another point in their favor, though a secondary consideration, is the comparatively low cost of the seed. This is due to large scale production under the highly favorable conditions of California, where our stock seed is grown for us under our personal supervision.

In comparative stock trials conducted at Wisley, England, by the Royal Horticultural Society, our strains of American-Grown stocks received five awards of merit—for trueness to type and high percentage of doubles. To those familiar with English thoroughness in conducting these trials, the significance of these awards will be appreciated. The varieties we find outstandingly fine for cutting are starred, and we believe that the suggestion these stars offer will be safe for most markets.

**IMPROVED BISMARCKS.** A trifle earlier than the Nice or Perpetuals and not inclined to branch so freely, making them more suitable for our close planting method of growing. Generally considered the most valuable group of stocks for cut flowers.

\*Rose. Fine standard color.

Flesh. Delicate shade of pink.

\*Lavender. Fine standard color.

\*Chamois. Choice market color.

\*Golden Ball. Clear ivory-yellow.

\*White. Early clear white.

Apple Blossom. Light pink.

\*Lilac. Lilac-lavender.

	1/8 oz.	1/4 oz.	1 oz.
Prices, separate colors above .....	\$0.50	\$1.00	\$3.00

Mixed, all colors.....	.35	.60	2.25
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Royal Purple. Rich deep purple .....	.75	1.25	4.00
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Antique Copper. A fine copper-red .....	.75	1.25	4.00
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Golden Rose. Light rose.....	.75	1.25	4.00
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Crop of Double-flowering Stocks in Greenhouse

**BEAUTY OF NICE.** For long stems and branching habit this is a fine group and includes some of our choicest kinds.

\*Mont Blanc. Clear, extra early white.

Almond Blossom. White tinged rose.

Monte Carlo. Rich canary-yellow.

\*Aurora. Golden buff, fine.

Belle De Naples. Rich old rose.

Salmon King. Strong salmon-rose.

Beauty of Nice. Flesh-pink.

\*Cote D'Azure. Light or lavender-blue.

Summer Night. Early purple.

Carmine Rose. (Abundance).

Blood Red.

Sou. De Monaco. Best crimson, late.

American Beauty. Deep rose, tends to come blind under glass.

\*Queen Alexandra. Rosy lilac, fine.

	1/8 oz.	1/4 oz.	1 oz.
Prices, separate colors.....	\$0.40	\$0.75	\$2.50

Mixed, all colors.....	.35	.60	2.00
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Flowers at Ball Gardens, West Chicago, Ill.

## Growing Stocks

IN a night temperature of 45° to 50° a crop will flower in about three months from planting of seedlings, and we figure on a month from sowing to planting seedlings. The close planting method is generally used. This calls for spacing seven inches between rows across the bed and about two and one-half inches in the rows. When they reach a height of five to six inches we remove a few of the weakest seedlings, for it has been definitely proved that the weakest plants tend to come single.

Stocks enjoy a rich soil, as do practically all plants, but we fail to find that such a soil influences the percentage of doubles. A form of black stem-rot is the most dreaded enemy of this crop. It will sometimes develop in a fresh, clean soil, but usually not to a serious extent. Overwatering, especially during dark cold weather, will greatly encourage black stem-rot.

**PERPETUAL BRANCHING (Giant Perfection).** A valuable group that produces fine, long stems and is of strong branching habit.

- \*Rose. A clear even shade.
- Sapphire. Violet or dark lavender.
- \*May Queen. Lavender or pale blue.
- Snowdrift. Fine clear white.
- Princess Alice. Early white.
- La France. Blush, nearly white.
- \*Heatham Beauty. Terra cotta rose, very fine.
- \*Empress Augusta Victoria. Silver-lilac and very fine.
- Brilliant. Blood-red, not a standard market color.
- Dark Blue.
- Light Blue.

Prices, separate colors..... $\frac{1}{8}$  oz.  $\frac{1}{4}$  oz. 1 oz.  
\$0.40 \$0.75 \$2.50

Mixed, all colors..... .35 .60 2.00

**TEN WEEKS.** This class is of compact branching habit, ideally suited for pot plants or bedding, but not for cut flowers. Produces a high percentage of doubles.

- Blood Red.
- Deep Rose.
- Canary Yellow.
- Lavender.
- White.
- Carmine Pink.
- Purple.

Prices, separate colors..... $\frac{1}{8}$  oz.  $\frac{1}{4}$  oz. 1 oz.  
\$0.40 \$0.75 \$2.50

Mixed, all colors..... .35 .60 2.00

WE publish a complimentary circular that gives complete details on the most approved methods of growing stocks. You might get some ideas from it.

## Winter-Flowering Snapdragons

**B**RIGHT attractive colors with flowers well placed are important points in greenhouse snaps. More than ever is it necessary to select varieties with these qualifications in mind. This is especially true for the market grower.

### Your Seed — Handle With Care!

Sowing seed during midsummer calls for close attention. We believe most failures, both in germinating it and damping off later, are due to the combination of high temperature and lack of care in watering. Maintaining the soil uniformly moist, not wet, until germination takes place is very necessary. Snap seed will almost certainly rot in a wet, muddy soil and a temperature in the 90's, and this applies to the summer sowing of all fine seed. To insure prompt drainage and a sweet soil, half sand is used with it.



New Winter-Blooming Snapdragon Rose Queen.

Any seed as fine as that of snapdragons must, of course, be covered lightly and this exposes it to the danger of the other extreme, unless carefully watched, for if the surface soil dries off as the fine seed is germinating, it is very liable to perish. We place our seed flats in a heavily shaded, airy house, cover them with paper, examine them frequently and, when necessary to water, use a fine spray. After the seedlings are well on their feet, be sure to reduce the shade and maintain the soil on the dry side, or they will tend to rot off. Damping off causes much loss and is easier to control if the flats are moved outdoors. The north side of a building, where they will be shaded through the warmest part of the day, or under a tree, are comfortable locations for snap seedlings. But watch the watering. We offer these suggestions for the reason that much seed is lost during midsummer, and this loss is sometimes unfairly costly, in good will, to your seedsman.

We know from experiments that snap seed will hold its germination perfectly for at least five years, yet we carefully test every lot on hand regularly, and during June we have a check in flower of every lot of seed of all varieties. In this way we insure, as nearly as it can be done, germination and trueness of stock.

### The two very finest varieties:

**ROSE QUEEN.** Highly attractive deep rose with ideally placed flowers on strong, stiff stems. We find it difficult to imagine a finer deep rose-pink. Tr. Pkt., \$2.00; 3 for \$5.00; 5 for \$8.00.

**AFTERGLOW.** Attractive golden bronze. Finely placed flowers on long stems. We do not hesitate to say that this is the last word in this color. Tr. Pkt., \$1.50; 3 for \$4.00; 5 for \$6.00.



# The Finest American Snapdragons

GENERAL experience agrees that the following are the choicest standard kinds for midwinter growing. Listed in the order of their value.

**ROSE QUEEN** and **AFTERGLOW** at bottom of preceding page.

**CHEVIOT MAID.** Early and free-flowing standard rose-pink. A favorite.

**CEYLON COURT.** Can be improved in size and color and will be probably next season, but is today the finest yellow.

**HAPPINESS.** We find this a light shade of rose-pink, extra fine stems, with excellent placement of flowers. The color varies a trifle from light to dark, but will bunch together well. We like it.

**WHITE ROCK.** The best standard white we have. Heavy growth and clear color.

**PURITY.** Not so long-stemmed, but freer-flowering and pure paper white.

**ROMAN GOLD.** Deep yellow with copper and pink suffusion.

**GOLDEN PINK QUEEN.** Deep rose-pink.

**IMP. SUNBURST.** Color of Sunburst rose.

**HELEN.** A beautiful shade of salmon, not extra long-stemmed, but free.

**LAURA.** Dark rose, well placed flowers.

**GENEVA PINK.** Rich soft rose-pink.

**JENNIE SCHNEIDER.** A popular shade of soft rose, not extra early with us.

**PHILADELPHIA PINK.** A standard pink and a very good one.

**ORLANDO.** A standard bronze.

**MOHR'S PINK.** A deep shade.

**JUDD'S DARK PINK.** Deep rose-pink.

**JUDD'S LIGHT PINK.** An attractive appleblossom light pink, not extra long-stemmed, but the color is unlike any other winter-blooming variety.

**PENN ORANGE.** Tangerine-orange.

**SILVER PINK.** Light pink.

**FLORISTS' MIXTURE OF THE BEST WINTER VARIETIES.** A well balanced combination of all the above except Rose Queen and Afterglow.

## PRICES ON ABOVE.

	Tr.Pkt.	3 Pkt.	5 Pkt.		Tr.Pkt.	3 Pkt.	5 Pkt.
*Rose Queen.....	\$2.00	\$5.00	\$8.00	*Laura .....	\$1.00	\$2.50	\$4.00
*Afterglow .....	1.50	4.00	6.00	Geneva Pink .....	1.00	2.50	4.00
*Cheviot Maid .....	1.00	2.50	4.00	*Jennie Schneider .....	1.00	2.50	4.00
*Ceylon Court .....	1.00	2.25	3.50	Philadelphia Pink .....	1.00	2.50	4.00
Happiness .....	1.50	4.25	6.75	Orlando .....	1.00	2.50	4.00
*White Rock .....	1.00	2.50	4.00	Mohr's Pink .....	1.00	2.50	4.00
Purity .....	.50	1.25	2.00	Judd's Dark Pink.....	1.00	2.50	4.00
*Roman Gold .....	1.00	2.50	4.00	*Judd's Light Pink.....	1.00	2.50	4.00
Golden Pink Queen.....	1.00	2.50	4.00	Penn Orange .....	1.00	2.50	4.00
*Imp. Sunburst .....	1.00	2.50	4.00	Silver Pink .....	1.00	2.50	4.00
Helen .....	1.00	2.50	4.00	Florists' Mixture .....	.75	2.00	3.00

## NEW SNAPDRAGONS

**CHEVIOT MAID SUPREME.** Shade darker than Cheviot Maid, larger flowers, stronger stem, ten days earlier.

**SUN-TAN.** Rosy tan, with yellow tinge on lip. Characteristics of Cheviot Maid Sup. Above from Frank Volz, Cincinnati, O.

**WINTER KING.** Extra early, clear rose.

**SUNSHINE.** The new golden yellow with closely set flowers.

**CLAUDESPY.** The snow white sport from Cheviot Maid.

We supply any of the above in introducer's packets. Pkt., \$2.00; 3 pkts., \$5.00.

While we have had no trials of these, we are convinced from flowers noted at shows that they are another step forward.

**MAJESTIC TWILIGHT.** Rich golden apricot with salmon shadings; the largest-flowering of all snaps and a most attractively rich color, but not an early or winter-bloomer. Plant after mums for spring flowering. Tr. Pkt., \$1.00; 2 pkts., \$2.50; 5 pkts., \$4.00.

**MAJESTIC ORANGE KING.** Fine, clear orange of same growth and spring-flowering habit, but not so true to color. Price: 50c per pkt.; 3 pkts., \$1.00.

## STANDARD FOR OUTDOOR PLANTING.

**GOLDEN QUEEN.** Good yellow.

**CLIMAX.** Bronze-orange.

**EMPRESS.** Velvety crimson.

**FAWN.** Terra cotta.

**GLORIA.** A good pink.

**HARMONY.** Terra cotta pink.

**ORCHID.** Mauve-pink.

**"STANDARD" MIXTURE**

All are priced at: Pkt., 35c; ¼ oz., 75c.

**MAXIMUM TYPE.** Extra strong growers.

**CANARY BIRD.** Light yellow.

**CATTLEA.** Mauve-pink.

**COPPER KING**

**RUBY.**

**THE ROSE.** Clear rose. **SNOWFLAKE.**

**MAXIMUM MIXTURE.**

Above priced at: Pkt., 35c; ¼ oz., 60c.



## Florists' Pansies

WE annually devote a 200-foot bed to pansies for cutting, and in this bed we line up a trial of all strains offered by us as well as many others from specialists. We find these trials most interesting. Frequently very large-flowering strains will produce blooms that are soft and spot easily or will not produce freely and early. Pansies enjoy a soil that is well enriched and made light with organic manure. For winter-flowering we prefer to sow seed in June and carry through the summer in a partially shaded coldframe. A sowing during July or even August will do, but the high temperatures of these months are frequently the cause of perfectly good seed failing to germinate. This is caused by the soil not being maintained uniformly moist. Too wet or too dry is fatal. Please watch this important point. All the seed we are sending out is carefully tested for germination and we know it is sound, yet occasional complaints are received on pansy seed during July and August. We find the following varieties are dependably fine.



**IMPROVED SWISS GIANTS.** Considering the price, we clearly find this to be the preferred all-purpose strain. Flowers are unusually large, with wonderfully original color combinations. Practically all flowers are 3 to 5-blotched and long-stemmed, very choice to use for spring plant sales or winter cut flowers.

**FIVE-BLOTCHED SUPER SWISS GIANTS.** 85 to 90% of this strain will produce 5-blotched flowers. This is a special selection made for increased size and wavy outline of flowers. The last word in fancy pansies.

**STEELE'S MASTERPIECE MIXED.** We find this a very fine mixture of large flowers, well proportioned colors and long-stemmed. Originator's seed.

**STEELE'S MIRACLE MIXED.** We find this a very good mixture of long-stemmed flowers. Originator's seed.

**STEELE'S GREENHOUSE SPECIAL.** A popular-priced mixture of very good colors. Largely used by plant growers. Originator's seed.

**BALL'S GIANT MIXTURE.** This is a special popular-priced mixture intended for both cut flowers and plants. Contains a good proportion of extra large, long-stemmed flowers.

**STEELE'S GOLDEN GATE YELLOW.** A deep yellow with dark center and a small proportion of dark shades. Originator's seed.

**GOLDEN QUEEN.** This is a fine strain of golden yellow and should be used where this color is wanted for bedding.

**LORD BEACONSFIELD.** The standard choice blue pansy, largely used for bedding.

	Tr. Pkt.	¼ oz.	1 oz.
IMPROVED SWISS GIANTS.....	\$1.00	\$2.00	\$ 7.00
SUPER SWISS GIANTS.....	1.00	3.50	12.00
STEELE'S MASTERPIECE MIXED.....	1.00	2.75	10.00
STEELE'S MIRACLE MIXED.....	1.00	2.25	8.00
STEELE'S GREENHOUSE SPECIAL.....	.75	1.75	6.00
BALL'S GIANT MIXTURE.....	.50	1.50	5.00
STEELE'S GOLDEN GATE YELLOW.....	1.00	2.50	9.00
GOLDEN QUEEN.....	.25	.50	1.75
LORD BEACONSFIELD.....	.25	.50	1.75

## Pot Plants from Seed

**A**SIDE from the fact that the seed of most of this class of stock is very small and must be handled with care, they are cool house plants and easily grown. They are furthermore indispensable to retail florists.

### CINERARIAS.

**Giant Exhibition Mixed.** Of compact growth, extra large-flowering, and the assortment of colors is complete and most attractive. This strain is the result of much and careful selection from the best stocks available and we offer it with the assurance that a finer strain of Giant Cinerarias is not available. Tr. Pkt., \$1.00;  $\frac{1}{4}$  oz., \$2.50.

**Hybrida Grandiflora (Semi-dwarf).** Of large-flowering, compact growth. A choice strain that produces a rich assortment of colors. Makes a fine medium-size pot plant. Tr. Pkt., 50c;  $\frac{1}{4}$  oz., \$1.50.

**Hybrida Multiflora Nana.** Of dwarf, compact growth completely covered with a mass of small, showy blooms in a wide range of brilliant colors. Tr. Pkt., \$1.00;  $\frac{1}{2}$  oz., \$2.50.

**Stellata Type.** Produces a tall, heavy growth that covers itself with small star-shaped flowers. Fine for cutting or pot plants. **Feltham Beauty** is a fine mixture of colors of this type, not extra tall, flowers white centered. Tr. Pkt., 50c;  $\frac{1}{2}$  oz., \$2.50;  $\frac{1}{4}$  oz., \$1.50.

**CALCEOLARIAS.** Among the very choicest pot plants. Seed is exceedingly fine and must not be covered. After plants are established they are easily grown, must be lightly shaded when in flower. **Hybrida Grandiflora Mixed** is a choice mixture of colors. Tr. Pkt., \$1.00;  $\frac{1}{4}$  oz., \$2.00.

### SMALL-FLOWERING BEDDING BEGONIAS.

	Tr. Pkt.	$\frac{1}{2}$ oz.	$\frac{1}{8}$ oz.
<b>Luminosa.</b> Fiery scarlet, foliage reddish brown, 10-inch.....	\$0.75	\$2.00	\$6.00
<b>Prima Donna.</b> Fine rose shading to carmine, 12-inch.....	1.00	4.00	
<b>Glory of Erfurt.</b> Large carmine, 12-inch.....	.75	2.00	
<b>Christmas Cheer.</b> Extra large crimson-scarlet.....	1.00		
<b>Gustave Knaake.</b> Extra large salmon-pink.....	1.00	2.00	
<b>Radio.</b> Very large pure carmine-scarlet.....	1.00		

### PRIMULAS.

Among the most easily grown and popular winter pot plants.

**OBCONICA GRANDIFLORA.** This fine, large-flowering type heads the list of fancy primulas.

**Fasbender's Red.** Rich deep shade with extra large flowers. Tr. Pkt., \$1.00;  $\frac{1}{4}$  oz., \$2.50.

**Mueller's Berlin Rose.** Rich shade of clear rose. Tr. Pkt., \$1.00;  $\frac{1}{4}$  oz., \$2.00.

**Mohnstein's Dark Red.** Tr. Pkt., \$1.00;  $\frac{1}{4}$  oz., \$2.00.

**Grandiflora Mixed.** Pkt., 50c;  $\frac{1}{2}$  oz., \$1.25.



**MALACOIDES (Improved Baby Primrose).** Small-flowered, easily grown and popular for winter pot plants.

**Light Lilac.** Tr. Pkt., 50c;  $\frac{1}{8}$  oz., \$1.00.

**Rosea Superba.** Tr. Pkt., 50c;  $\frac{1}{16}$  oz., \$1.00.

**Forbesii.** Rosy lilac. Pkt., 50c;  $\frac{1}{16}$  oz., \$1.00.

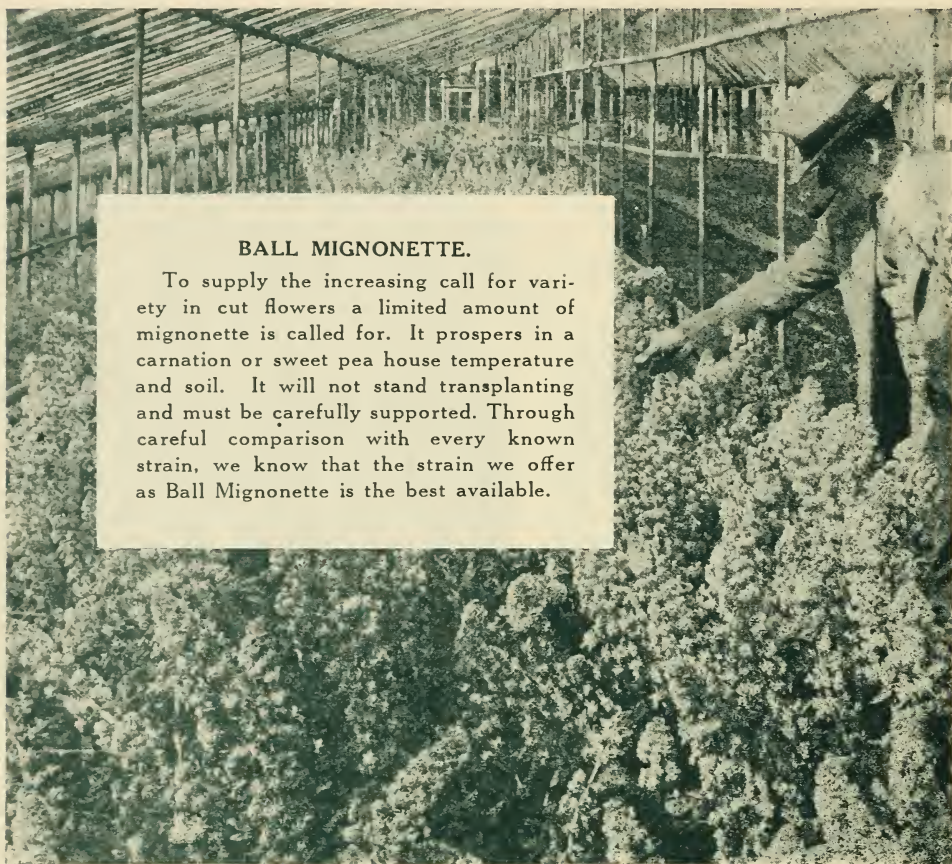
**Courtland Seedling.** New, clear light lilac-pink. Tr. Pkt., 75c;  $\frac{1}{4}$  oz., \$2.00.

**PRIMULA MALACOIDES "ERIKSSONI."** We pronounce this a distinct improvement in color and can furnish introducer's original packets, \$2.00.

**CHINESE PRIMULA MIXED.** All fine new shades. Tr. Pkt., 50c.

**CHINESE.** Giant Mixed. Special mixture of best shades. Tr. Pkt., 50c;  $\frac{1}{2}$  oz., \$2.25.





### BALL MIGNONETTE.

To supply the increasing call for variety in cut flowers a limited amount of mignonette is called for. It prospers in a carnation or sweet pea house temperature and soil. It will not stand transplanting and must be carefully supported. Through careful comparison with every known strain, we know that the strain we offer as Ball Mignonette is the best available.

A bed of Ball Mignonette as grown by us at our Glen Ellyn greenhouses. Note the heavy, closely set long spikes. It is not only superior in this respect, but is a lighter and more attractive color and 2 to 3 weeks earlier than any other cut flower strain.

We also have a carefully selected stock of the well known New York Market strain.

Ball Mignonette priced as follows: Trade packet, \$1.00;  $\frac{1}{4}$  oz., \$2.50;  $\frac{1}{2}$  oz., \$4.00; 1 oz., \$7.00.

New York Market priced as follows: Trade packet, 50c;  $\frac{1}{4}$  oz., \$1.25;  $\frac{1}{2}$  oz., \$2.25; 1 oz., \$4.00.

**SCHIZANTHUS WISETONENSIS.** By sowing seed in September and pushing along to 4-inch pots by November, they can be flowered for Christmas in a 50° house. Should be topped not later than mid-November. Easily grown and fine for pot plants or cutting.

Rose and Amber Shades. Tr. Pkt., 50c;  $\frac{1}{4}$  oz., \$1.00.

Brilliant Mixed. Tr. Pkt., 50c;  $\frac{1}{4}$  oz., \$1.00.

### MYOSOTIS BLUE BIRD

We find this the most attractive in color and stem of all the strains of Forget-Me-Not. Tr. Pkt., 50c;  $\frac{1}{8}$  oz., \$1.25.



## Annual Larkspur

**W**HETHER you grow for market or retail, the outstanding value of this annual should not be missed. It is very easily grown and equally as valuable for outdoor growing as under glass. Their long stems, graceful foliage and wide range of colors are reasons for their wide popularity.

**We do not recommend sowing larkspur during July and August.** Such sowing comes in with the mum season, and little attention is paid to larkspur at that time. Furthermore, the germination of seed in a high temperature is most difficult. If your conditions or trade call for this crop early, we suggest placing seed flats under greenhouse benches. We have seen it germinated successfully in a cool basement, while seed from the same lot planted in the greenhouse failed completely. A combination of wet soil and high temperature is especially bad. Requires ten days to two weeks to germinate.

The Hyacinth-flowered type produces but one long-stemmed spike of flowers and for this reason should be planted close. This type must not be permitted to make a heavy, soft growth, for the stems of such a growth become hollow and break easily. Planted on a raised bed in March, we find they do very well. For general purposes we recommend the stocks-flowered, or branching type.

We issue a circular on "Miscellaneous Cut Flowers" that includes some details on the handling of larkspur. Shall we send you a copy?

We supply 4 oz. at pound rate and ¼ oz. at ounce rate. Special quotation on larger quantities.

Liberal  
Tr. Pkt. 1 oz. 1 lb.

### STOCKS-FLOWERED TYPE:

*Exquisite Pink Imp. Clear soft pink .....	\$0.50	\$1.00	\$12.00
*Empress Rose. Soft rose, extra vigorous growth .....	.50	1.00	15.00
La France. Salmon-pink.....	.50	.75	10.00
Los Angeles. Rose lightly shaded salmon .....	.75	1.25	15.00
The Empress. Salmon-rose, base branching habit .....	.50	1.25	15.00
*White Spire. A superior white, base branching habit.....	.50	2.00	.....
Newport Pink. Lustrous carmine .....	.25	.60	6.25
Dark Blue .....	.25	.60	5.50
*Lilac .....	.25	.60	5.50
Rosy Scarlet .....	.25	.60	6.00
*Sky Blue .....	.25	.60	5.50
White .....	.25	.60	5.50
Mixture of all colors.....	.20	.50	4.25

### HYACINTH-FLOWERED TYPE:

*Pink .....	.25	.80	9.00
*Dark Blue .....	.25	.80	8.00
Lilac .....	.35	.80	9.00
Purple .....	.25	.80	8.00
White .....	.25	.80	8.00
Mixture of all colors.....	.20	.80	8.00



Emil Grafe and his boss, Miami, Fla. On the back of this snapshot Mr. Grafe wrote, "Empress Rose raised from Mr. Ball's Larkspur seed."

## For Summer and Fall Sowing

### ASPARAGUS PLUMOSUS.

Lath-house grown. 100 seeds, 30c; 1000 seeds, \$1.50; 5000 seeds, \$7.00; 10,000 seeds, \$12.00.

### ASPARAGUS SPRENGERI.

100 seeds, 25c; 1000 seeds, \$1.25; 5000 seeds, \$5.50; 10,000 seeds, \$10.00.

### CANDYTUFT.

The Giant Hyacinth and Umbellata types are a distinctly valuable crop to follow mums and can be planted throughout the winter and outdoors in the spring. The Giant Hyacinth type is produced in heavy, long, pure white spikes. Strong seedlings planted out about 8x8 inches March 1 will be in crop for Memorial Day, for which it is a valuable crop. We allow the Umbellata type about the same spacing but it requires two weeks longer to mature.

	Tr. Pkt.	1 oz.	1 lb.
Giant Hyacinth-flowered.			
Select stock .....	\$0.25	\$0.80	\$8.00
Umbellata Type:			
Rose Cardinal .....	.25	.60	5.00
Carmine .....	.25	.40	4.00
Lavender .....	.25	.50	4.50
White .....	.25	.40	4.00
Lilac .....	.25	.40	4.00
Flesh Pink .....	.25	.40	4.00
Crimson .....	.25	.40	4.00
Mixed .....	.20	.35	3.00

### CENTAUREA.

There are some valuable cut flowers under this heading. They are much used both for outdoors and under glass, particularly the double cyanus, or cornflower. The best color in this is blue, a fine dark shade. Rose is the next best color and is good.

*Centaurea Imperialis*, also known as Sweet Sultan, is the very attractive thistle type of cornflower. We find this is inclined to rot out easily if kept too wet.

*Centaurea Suaveolens*, or Yellow Sweet Sultan, does well under glass, but the type known as *Americana* should only be used for outdoor planting. If the flowers are cut close they will last well, and for best results it should be provided with some form of support.

	Tr. Pkt.	1 oz.	4 oz.
<i>Centaurea Cyanus</i> .			
Blue .....	\$0.15	\$0.40	\$1.50
Rose .....	.15	.40	1.50
Carmine .....	.15	.40	1.50
White .....	.15	.40	1.50

	Tr. Pkt.	1 oz.	4 oz.
<i>Centaurea Imperialis</i> .			
Amaranth Red .....	\$0.30	\$1.00	\$3.50
Brilliant Rose .....	.25	.75	2.75
Deep Lavender .....	.25	.75	2.75
Delicate Lilac .....	.25	.75	2.75
Rose .....	.25	.75	2.75
White .....	.25	.75	2.75
Mixed .....	.20	.60	2.25
Suaveolens. (Yellow Sweet Sultan) .....	.15	.40	1.75
<i>Americana</i> . (Large thistle type). Lilac .....	.15	.50	1.75
<i>Americana Alba</i> .....	.20	.80	2.00
<i>Candidissima</i> . (Dusty Miller). Silvery gray foliage. 1/4 oz., 50c .....	.25	1.50	.....
<i>Gymnocarpa</i> . Fine silvery foliage. 1/2 oz., 30c .....	.15	.50	.....

### CHINESE FORGET-ME-NOT (*Cynoglossum Amabile*).

Grows 18 to 20 inches tall, with dark blue forget-me-not flowers. A hardy perennial with distinct cut flower value and used to good advantage for garden decoration. Tr. Pkt., 25c; 1 oz., \$1.00.

### CLARKIA ELEGANS.

When grown under glass clarkia must be planted in shallow poor soil. Flats are fine for this purpose. For good-stemmed flowers space them about 4x4 inches and disbud to two stems. If watered freely or grown in deep soil the growth becomes worthlessly soft. Orange King and Salmon Queen are the choicest colors. We offer the following varieties: Orange King, Salmon Queen, Scarlet Queen, Queen Mary, Appleblossom. Liberal Tr. Pkt., 25c; 1 oz., 75c.

### DIDISCUS. Blue Lace Flower.

Long-stemmed, soft lavender colored flowers. Easily grown in a carnation house temperature, providing something different and of real cut flower value. Tr. Pkt., 25c; 1 oz., \$1.25; 4 oz., \$4.50.

### DRACÆNA INDIVISA.

Popular for vases and bedding. Can be sown at any time and must have heat to germinate. Tr. Pkt., 15c; 1 oz., 40c; 1 lb., \$4.00.

### DIANTHUS SWEET WIVELSFIELD.

Every retail grower should have this fine border plant. Can be used to good advantage for cutting and has proved to be hardy with us. We have the originator's selected stock. Tr. Pkt., 50c; 1/4 oz., \$1.25; 1 oz., \$4.00.



Our strain of this popular "Gyp" has been improved for us until individual blooms contain eight and nine petals, are quite round, pure white, with no dark veining in the petals.

A five-acre field of our famous strain of Gypsophila Paris Market for seed.

#### GYPHOPHILA ELEGANS PARIS MARKET STRAIN.

We are sure you cannot buy a better strain of this than we are offering. Indispensably economical to combine with other flowers in any kind of cut flower work. 1 oz., 20c; 4 oz., 50c; 1 lb., \$1.60; 5 lbs., \$7.00.

#### GERBERA. South African Daisy.

In a night temperature of 55° to 60° and a deep well drained light soil, gerberas can be made a successful cut flower crop. Sow seed in a light, well drained material. Placing them on edge, as is sometimes recommended, we find unnecessary. It is difficult even under most favorable conditions for seed to fully develop, which accounts for the fact that 1000 seeds will usually produce around 500 plants. 100 seeds, 60c; 1000 seeds, \$4.00.

#### GREVILLEA ROBUSTA.

Fine foliage plant. Tr. Pkt., 25c; 1 oz., 80c.

#### LUPINES, ANNUAL. Hartwegii.

We find this a decidedly profitable cut flower specialty and we rarely fail to receive first prize on our stock wherever shown. We sow about August 15 and grow on in 3-inch pots outdoors; we plant after early mums, spacing 8x8 inches. Plants must be protected while in the open against frost. The hardening received outdoors seems to make them resistant to a form of rot that lupines are susceptible to under

glass. The first or central flower spike is long and choice. This is disbudded down to five or six breaks about the base, that produces a crop during April and May. We find the dark blue to be the choicest color; next comes light or sky blue, then white. The rose has limited value.

Any of the above named colors: Tr. Pkt., 20c; 1 oz., 30c.

#### LUPINUS SULPHUREUS.

A golden yellow form that grows about 28 inches. Tr. Pkt., 20c; 1 oz., 50c.

#### SMILAX.

Retail growers continue to find this well known climber valuable. 1 oz., 50c; 4 oz., \$1.75; 1 lb., \$6.00.

#### STATICE, ANNUAL TYPE.

Suworowii. Russian statice. Also known as "Rat Tail." Long thin spikes of pink flowers. Tr. Pkt., 25c; 1 oz., \$1.00; 1 lb., \$11.00. Should be more widely known and used.

Sinuata. True blue. Will flower in three months from sowing. Tr. Pkt., 15c; 1 oz., 40c.

Sinuata. White. Tr. Pkt., 15c; 1 oz., 40c.

Bonduellii. Golden yellow. Tr. Pkt., 15c; 1 oz., 40c.

#### POPPY EL MONTE. Nudicaule.

A deep tangerine-orange poppy of unusual size on extra long, wiry stems. Tr. Pkt., 50c; 1/4 oz., \$1.25; 1 oz., \$4.00.



# Hardy PERENNIALS

Ball Gardens, West Chicago, Ill., includes a thirty-acre nursery in which perennials are largely grown for cut flowers. We frequently find the net profit on this class of stock exceeds that of greenhouse stock. Well drained land and frequent cultivation are important in getting a clean, vigorous growth that will not freeze out.

**AQUILEGIA.** Graceful, long-stemmed perennials that every retail grower should be interested in.

Tr. Pkt. ¼ oz. 1 oz.

Mrs. Scott Elliott's Hybrids. The choicest long-spurred strain.....	\$0.50	\$1.25	\$4.00
Dobbie's Imperial Hybrids. A choice European strain .....	.50	1.50	5.00
Jaetschauii. Large yellow with red spurs .....	.50	1.00	3.00
Cærulea. Blue .....	.50	.60	2.25
Chrysantha, Silver Queen. Long-spurred silvery white.....	.50	1.25	4.00
Choice Mixed. A good mixture of long-spurred mixed colors.....	.40	1.00	3.00

**BELLIS PERENNIS.** Double English Daisy. The Monstrosa varieties. Pink and white are the choicest available.

Tr. Pkt. ¼ oz. 1 oz.

Each color priced at.....	\$0.50	\$0.75	\$2.00
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**CAMPANULAS.** Canterbury Bell. Cup-and-Saucer varieties.

Tr. Pkt. ¼ oz. 1 oz.

Dark Blue (Violet).....	\$0.25	\$0.50	\$1.60
Light Blue (Lilac).....	.25	.50	1.60
Rose .....	.25	.50	1.60
White .....	.25	.50	1.60
Mixed .....	.20	.40	1.25

**COREOPSIS.**

Regular single .....	.15	.....	.35
Semi-double .....	.25	.35	1.00

**DAISIES.**

Alaska. The well known Shasta Daisy .....	1 lb., \$15.00	.25	.30	1.00
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We have an especially fine select cut flower strain of this profitable cut flower daisy.

Elder. From Hartje & Elder's stock; comes quite true from seed.....	.25	.....	1.25
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**GAILLARDIA GRANDIFLORA.** Fine cut flower crop.

Tr. Pkt. ¼ oz. 1 oz.

Portola Hybrids .....	\$0.50	.....	\$2.00
The Dazzler .....	.25	\$0.50	1.50

**DELPHINIUM.** Our stock of all varieties can be depended on to come true to type. We carefully test this seed regularly for germination.

Tr. Pkt. ¼ oz. 1 oz.

Belladonna Improved. A very fine selection .....	\$0.50	\$0.75	\$2.75
Belladonna. Regular .....	.25	.....	1.75
Bellamosum. Dark blue.....	.50	.....	2.50
Gold Medal Hybrids.....	.25	.....	1.00
Hollyhock Type. (Wrexham Strain). This is the choicest available stock among fancy delphiniums. Colors range from light to dark blue, and for size and stately growth this strain we find unexcelled.....	1.00	.....	6.00

**GYSOPHILA PANICULATA.**

Double Snow White.....½ oz., \$2.75	.50	.....	5.00
Single White .....	.15	.30	.60

**HOLLYHOCKS.**

Newport Pink. Double; a rich shade of pure pink.....	.25	.40	1.25
Chater's Double Chamois.....	.25	.40	1.25
Chater's Deep Rose.....	.25	.40	1.25
Chater's Sulphur Yellow.....	.25	.40	1.25
Alameda Pink. Allegheny type light pink .....	.25	.50	1.50
Allegheny Mixed .....	.25	.....	.60

**LATHYRUS.** Hardy perennial sweet pea.

Tr. Pkt. ¼ oz. 1 oz.

Pink Beauty .....	\$0.25	.....	\$0.75
White Pearl .....	.25	.....	.75
Mixed .....	.15	.....	.50

**MATRICARIA.** Feverfew.

Double White. While not so uniform as a good stock from cuttings, the strain we offer comes evenly double .....	.20	.....	.50
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**PYRETHRUM.** A distinctly valuable cut flower perennial and perfectly hardy.

Tr. Pkt. ¼ oz. 1 oz.

Hybridum. Single Mixed.....	\$0.25	\$0.50	\$1.40
Hybridum. Double Mixed.....	.50	1.50	5.00

**SCABIOSA.** The perennial type is perfectly hardy and valuable for cutting.

Tr. Pkt. ¼ oz. 1 oz.

Caucasica. Lilac. The best for cutting .....	\$0.50	\$0.75	\$2.00
Columbaria. Pink. Not so long-stemmed as Caucasica, but choice for cutting .....	.50	1.00	3.00
Columbaria. Lavender .....	.50	1.00	3.00

**STATICE LATIFOLIA.** Blue. Fine to use fresh or for drying.

Tr. Pkt. ¼ oz. 1 oz.

\$0.25	.....	\$1.25
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**STATICE CASPIA.** Large, lilac.

Tr. Pkt. ¼ oz. 1 oz.

\$0.50	.....	\$3.00
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# Fine Petunias

**G**ERMINATING petunia seed requires care and experience. Its extreme fineness makes it easily washed out through careless watering or smothered under too much covering. It should be sown in flats of finely sifted light soil and sand. It is frequently covered too deep. This can be avoided by not covering at all. If frequently sprayed and heavily shaded, it will germinate readily without cover, but care must be used in exposing to the light until roots are well in the soil. We prefer a very light covering. The seed should be sown in a night temperature of 55 to 60°. If sown in a cold, wet soil it will rot.

Varieties particularly valuable are marked with a star (\*).

**GIANT-FLOWERED, Single.** The largest-flowering class of petunias.

	Tr. Pkt.	$\frac{1}{4}$ oz.	$\frac{1}{2}$ oz.	$\frac{1}{8}$ oz.	$\frac{1}{16}$ oz.
*Ramona Strain Mixed. Choice selection from Dwarf Giants of California.....	\$1.00	\$2.25	\$4.00		
Dwarf Giants of California. Very fine mixture.....	1.00	2.00	3.00		
Giants of California. A fine, strong-growing, giant-flowered mixture.....	.50	1.00	1.75	\$2.75	\$5.00
*German Empress. A true ruffled giant, veined violet-blue with dark throat.....	.50	1.50			
Princess of Wuerttemberg. Rich rose with purple veins. Very richly colored.....	.50	1.25	2.00		
Theodosia. Large fringed pink with light throat.....	1.00	2.00	3.75		
*Diener's Giant Ruffled Pink. Fine rose and comes very true to color.....	.50		2.00	3.50	6.00
*Giant Steel Blue. Very large, extra choice blue, richly veined and fringed.....	1.00	3.00	5.00		
Fringed Royal Purple. Deep velvety violet; fringed and very choice.....	1.00	2.00			

**LARGE-FLOWERING, Single, Fringed.** Popular kind for bedding and pot culture.

	Tr. Pkt.	$\frac{1}{4}$ oz.	$\frac{1}{2}$ oz.	$\frac{1}{8}$ oz.	$\frac{1}{16}$ oz.
*Pink Triumph. Fringed, large deep rose.....	\$0.75	\$2.00	\$3.50		
Romany Lass. Finely fringed red.....	.50	2.50			
Fluffy Ruffles. A finely fringed mixture.....	.50	1.50	2.50		
*White Beauty. A well fringed large white.....	1.00	2.25	3.00		
Ruffled Blue and White. Plain edged, large and strong growth.....	.50	2.00	3.50	\$6.00	
*Diener's Ruffled Monsters. A well named mixture.....	.75	3.00	5.50	10.00	
Diener's Ruffled Appleblossom.....	.50	2.50	4.50		
Fimbriata, Single, Mixed. Finely fringed mixture.....	.50	1.50	2.50		

**PORTLAND PETUNIAS.** Free-flowering; strong, upright growth; fine for bedding.

	Tr. Pkt.	$\frac{1}{4}$ oz.	$\frac{1}{2}$ oz.	$\frac{1}{8}$ oz.	$\frac{1}{16}$ oz.
*Elk's Pride. Very rich velvet-purple, plain edged.....	\$0.50		\$1.25	\$2.25	
*Pink Glory. Slightly ruffled deep rose, fine growth.....	.75	\$1.00	1.75	3.00	
*Dwarf Pink Glory. A dwarf selection from Pink Glory.. Very fine for pot culture.....	.75	1.50	2.50		
Pride of Portland. Fringed pink.....	.50		1.50	2.50	

**BALCONY PETUNIAS.** Of semi-trailing habit, adapted to porch or window boxes.

*Star of California. (New Balcony Type). Velvety violet with a touch of crimson. Tr. Pkt., 50c; $\frac{1}{2}$ oz., \$1.50; $\frac{1}{4}$ oz., \$2.50.	Tr. Pkt.	50c;	$\frac{1}{2}$ oz.,	$\frac{1}{4}$ oz.,
*Balcony Queen, purple and white. Tr. Pkt., 50c; $\frac{1}{4}$ oz., \$1.50; $\frac{1}{2}$ oz., \$2.75.				
*Violet Blue, Crimson, *Rose, White, Balcony Mixed. Tr. Pkt., 25c; $\frac{1}{8}$ oz., 50c; $\frac{1}{4}$ oz., \$1.75.				

**SINGLE SMALL-FLOWERED, Dwarf.** Heavily used for bedding, compact and free-flowing.

	Tr. Pkt.	$\frac{1}{8}$ oz.	$\frac{1}{4}$ oz.	1 oz.
*Alderman. We find this deep violet-blue clearly superior to Blue Bird.....	\$0.35		\$0.75	\$2.50
Blue Bird. Deep violet-blue.....	.25		.75	2.50
*Heavenly Blue. Light or silvery blue. Very choice.....	.50	\$1.00	1.75	
*Rose of Heaven. Clear rose-pink.....	.25		.60	1.75
*Rosy Morn. Rich pink with white throat.....	.50		.75	2.50
Dwarf Inimitable. Violet and white striped.....	.25		.50	1.50
Snowball. Dwarf white.....	.25		.50	1.50
Carmen Sylva. Baby blue with white throat.....	.25		.60	2.00
Special "Ball Mixture." Of all the above.....	.25		.50	1.50

**SINGLE SMALL-FLOWERED.** Largely used for bedding.

	Tr. Pkt.	$\frac{1}{4}$ oz.	1 oz.
Alba. Pure white.....	\$0.15	\$0.25	\$0.75
Countess of Ellesmere. Pink and white throat.....	.25	.40	1.00
General Dodds. Blood-red.....	.25	.40	1.50
Howard's Star Improved. Purple with white star.....	.25	.60	2.00
Lord Courtenay. Rich rose.....	.25	.50	1.50
*Venosa. Lilac with dark veins.....	.25	.40	1.00
Violaacea. Deep violet.....	.25	.50	1.75
Small-flowering Mixture.....	.25	.50	1.75

**SMALL-FLOWERED, Double.**

	Tr. Pkt.	$\frac{1}{2}$ oz.
Carnation-flowered, new. Bright pink (Double Rosy Morn).....	\$1.00	\$3.00
Carnation-flowered, new. Mixed colors.....	1.00	2.50

**GIANT DOUBLE FRINGED (Peony-flowered).** The strain of double fringed petunias we are offering is the choicest of all the stocks we have examined. Of compact growth; excellent for pot culture. Tr. Pkt., \$1.00;  $\frac{1}{4}$  oz., \$8.00.



# Flower Seed Specialties



**T**HE flower seed crops we specialize in selling are grown in our greenhouses and on our grounds under the same conditions and for the same purpose that you will grow them. We thus check up on the worth of all new and standard kinds. As growers we are able to select varieties with your needs in mind. This is one reason why we are supplying over 10,000 growers with our seed specialties. May we be of service to you?

*Gro. J. Ball.*  
WEST CHICAGO,  
ILL.